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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/924,235	08/08/2001	Hitoshi Kitayoshi	KITANO.009AUS	2765

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MURAMATSU & ASSOCIATES
Suite 310
114 Pacifica
Irvine, CA 92618

EXAMINER

ISSING, GREGORY C

ART UNIT PAPER NUMBER

3662

DATE MAILED: 06/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/924,235

Applicant(s)

KITAYOSHI, HITOSHI

Examiner

Gregory C. Issing

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1 and 3-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The language in claim 1, "creating simulated patterns of intensities and emitting directions of a simulated radiowave emitted from one position" is contradictory to applicant's arguments. The claim specifically states that the patterns are created by a "radiowave emitted from one position" yet applicant argues that in fact there is no actual emission. Thus, the language remains unclear since whether a radiowave is emitted or not is not definitely set forth in the claim language. It would appear that the language "of a simulated radiowave emission from . . ." would overcome the lack of clarity since it is the emission that is simulated and not the radiowave. This should be corrected in all of the claims.

In claim 12, the language "for storing simulated patterns of intensities and emitting directions at other plural positions in the observation area of a simulated radiowave emitted from said one position" lacks clarity. It would appear that the language "for storing simulated patterns of intensities and emitting directions of a simulated radiowave emission from the one position to a plurality of positions in the observation area" would overcome the lack of clarity. However, the claim is directed to an apparatus and particularly a "storing means" in this subsection. Thus, how simulated patterns were obtained is not a limiting feature of the storing means and therefore fails to provide any limitative function. It is suggested to add, prior to the claimed "storing means", a "simulation means for generating simulated patterns of intensities and emitting directions of a simulated radiowave emission from the one position to a plurality of positions in the observation area through computations performed while changing the emitting direction of the simulated radiowave" and amend the language of the storing means to substantially storing the results.

Claim 17 is indefinite since "the simulation result" is undefined. Moreover, it is unclear what the "tracing means" comprises since it appears merely to be a mathematical formulation.

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3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 12-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Chen et al (6,496,701).

Chen et al teach a pattern-recognition-based geolocation system and method for identifying the location of a mobile terminal wherein there is included a storing means 34 for storing simulated patterns of base station data wherein the database may be created by the construction of a statistical model using an RF propagation formula. The location of the mobile terminal is determined by a comparing a set of discrete RF characteristics received at a sub-cell with a stored set of data attributes in order to identify a sub-cell of the plurality which most closely matches the set of measured attributes. Thus, the base station meets the scope of the claimed one position since it measures RF attributes from the mobile terminal, the pattern database meets the scope of the claimed storing means such that the attributes stored therein are created using a statistical model using RF propagation formula. The RF signature inherently includes directional information by definition since it defines the beam pattern confined within the sub-cell of the base station. A radio signature encompasses both two and three dimensional areas.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 12-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over either one of Hilsenrath et al (6,026,304) or Wax et al (6,249,680).

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7. Each of Hilsenrath et al and Wax et al teach a radio transmitter location finding system including a base station at one position of an observation area for observing a radio signature of an emitted radiowave signal from a mobile terminal, storage means for storing a database of calibrated signatures associated with corresponding locations, and a comparing means for comparing the observed signals to the stored signatures to find a best match, which best match denotes a position. A radio signature inherently includes directional information with respect to the base station associated therewith.

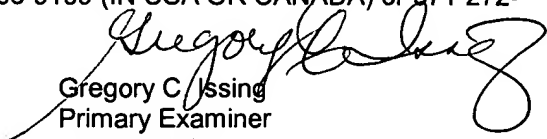
Moreover, in view of the claim language of claim 12, the limitations of how the simulated patterns are stored is non-limiting since the claim is directed to the storing means associated with the apparatus.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Each of Heiska et al (6,785,547) and Takahashi (5,689,812) disclose systems for simulating radio propagation from a source of a radiowave, such as a communication base station, taking into account the environment, such as buildings and the like, for storage in a database, for the purpose of network planning.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory C. Issing whose telephone number is (571)-272-6973. The examiner can normally be reached on Monday - Thursday 6:00 AM- 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Tarcza can be reached on (571)-272-6979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Gregory C. Issing
Primary Examiner
Art Unit 3662

gci